

**Common SRD Version Two, Revision c List of Changes through 31 May 2000 since  
Version Two, Revision b 25 February 2000**

**CCBD 00019**

1. SRDX 3.3.2.2.2.1-2

Current requirement: "The sensor shall not impact the search and rescue mission during any mode of operation."

Change **to**: "The sensor shall not impact the search and rescue mission during any mode of operation (TBS)."

2. SRDX 3.3.2.2.5.2-6

Current requirement: "The requirement applies to all continuous emissions. Transient or pulse noise shall be considered on a case-by-case basis, but shall not in any way detrimentally affect the normal operation of the SAR or DCS subsystems."

Change **to**: "Transient or pulse noise shall be considered on a case-by-case basis, but shall not in any way detrimentally affect the normal operation of the SAR or DCS subsystems (TBS)."

**CCBD 00021**

**Remove** (TBR)s from title in SRDX 3.3.12.4.2 Pressure Loads (TBR), and in Note b to Table 3.3.12.4.2

**CCBD 00037**

3.2.4.8.2.1 Bus Functions

Change FROM:

The C&T Data Bus requirements listed below can be satisfied by a combination of shared buses (such as MIL-STD-1553B and AS-1773 or equivalent), or, if necessary, a dedicated connection (such as EIA RS-422). The choice of a particular data bus for a sensor will depend on the data rate for that sensor. [Note: the use of a dedicated connection may require deviation from the requirements listed below.] Data rates for the sensors and spacecraft subsystems may require multiple data buses.

Change TO:

The C&T Data Bus requirements listed below can be satisfied by a data bus (such as MIL-STD-1553B for lowrate mission data, or IEEE-STD-1394a for high rate mission data). The 1394a bus topology is daisy-chain (TBR). The choice of a particular data bus for a sensor will depend on the data rate for that sensor. [Note: the use of any other

connection will require a waiver/deviation.] Multiple data buses may be utilized on the satellite. However, each instrument will utilize either the 1553 low-rate bus, or the 1394a high-rate bus, but not both. Instruments with data rates in excess of 50 kbps will be assigned to the 1394a, high rate data bus. Instruments with data rates up to and including 50 kbps will be assigned to the 1553, low rate bus.

#### 3.2.4.8.2.2 Bus Type

SRDX3.2.4.8.2.2-1

Change FROM:

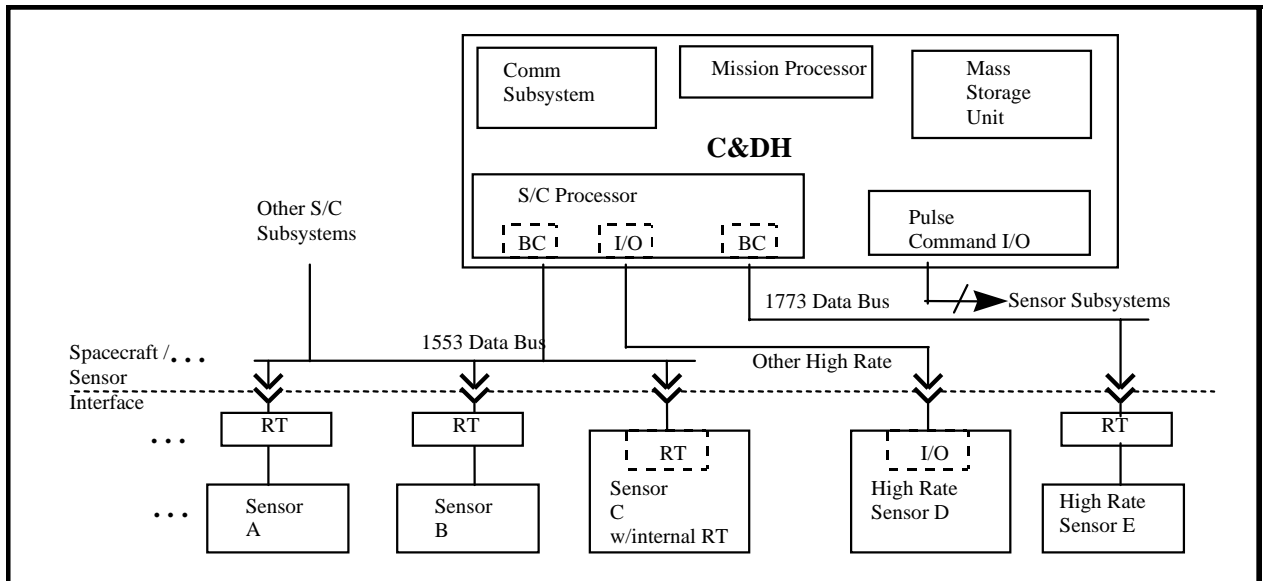
Each C&T data bus shall be dual standby redundant, and shall fully comply with the requirements of SAE AS-1773 or Mil-STD-1553B, Notice 2, all sections.

Change TO:

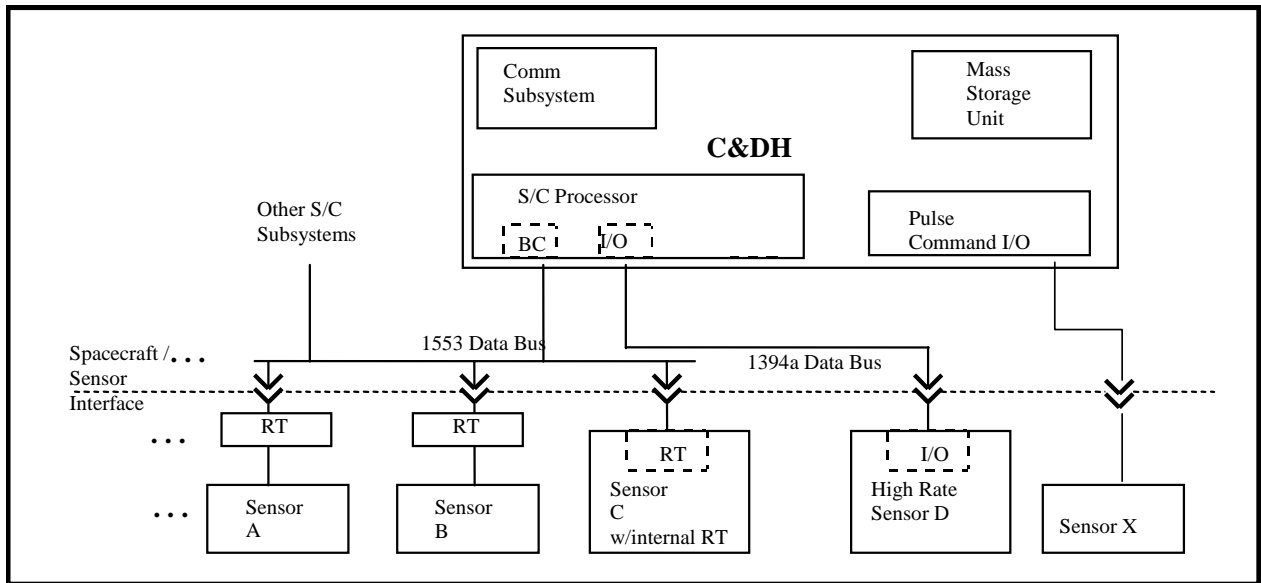
Each C&T data bus shall be standby redundant, and shall fully comply with the requirements of IEEE-STD-1394a (all relevant sections, as further defined by the spacecraft-instrument ICD) or Mil-STD-1553B, Notice 2, all sections.

**Figure 3.2.4.8.2.3 Command and Data Handling Interface Topology**

FROM:



TO:



### 3.2.4.8.3 General Bus Characteristics

#### 3.2.4.8.3.1 Electrical/Optical Interface

Change FROM:

The spacecraft contractor will define the bus implementation characteristics not defined in AS-1773. These characteristics will be documented in the sensor-spacecraft ICD.

Change TO:

The spacecraft contractor will define the bus implementation characteristics not defined in IEEE-STD-1394a. These characteristics will be documented in each sensor-spacecraft ICD.

SRDX3.2.4.8.3.1-6

Change FROM:

For those sensors requiring the AS-1773 bus connection, the sensor contractor shall be responsible for providing an RT which fully complies with the implementation parameters defined in the sensor-spacecraft ICD and with SAE AS-1773.

Change TO:

For those sensors requiring the high speed bus connection (data rates in excess of 50 kbps), the sensor contractor shall be responsible for providing a cable interface which fully complies with the implementation parameters defined in the sensor-spacecraft ICD and with IEEE-STD-1394a.

**CCBD 00035**

To the common section of the SRD add the following:

“SRDX3.2.4.2.1.2.1-2 Sensor unique mounting hardware [e.g. flexure mounts] shall not be accountable against the sensor dimension allocations.”

“SRDX3.2.4.2.1.2.1-3 Sensor unique mounting hardware shall not exceed [TBD] cm in any direction.”

“SRDX3.2.4.2.1.2.1-4 Sensor unique mounting hardware mass shall be included in the sensor mass allocations.”

“SRDX3.2.4.2.1.2.1-5 Sensor unique mounting hardware shall be the responsibility of the sensor contractor.”

“SRDX3.2.4.2.1.2.1-6 Sensor unique mounting hardware shall be documented in the sensor-spacecraft ICD.”

“SRDX3.2.4.2.1.2.1-7 Standard mounting appendages which are integral to the sensor shall not be accountable against the sensor dimension allocations.”

“SRDX3.2.4.2.1.2.1-8 Standard mounting appendages shall not exceed [TBD] cm in any direction.”

“SRDX3.2.4.2.1.2.1-9 Standard mounting appendages shall be included in the sensor mass allocations.”

“SRDX3.2.4.3.3.4.1-6 The sensor interface mating connectors shall not be accountable against the sensor dimension allocations.”

“SRDX3.2.4.3.3.4.1-7 The sensor interface mating connectors dimensions shall be documented in the sensor-spacecraft ICD.”

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